



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
22.11.2023 Bulletin 2023/47

(51) International Patent Classification (IPC):
H02J 7/00^(2006.01) H01M 10/44^(2006.01)

(43) Date of publication A2:
30.08.2023 Bulletin 2023/35

(52) Cooperative Patent Classification (CPC):
**H02J 7/0013; H01M 10/44; H02J 7/007182;
Y02E 60/10**

(21) Application number: **23176079.4**

(22) Date of filing: **08.10.2018**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

(71) Applicant: **LG ENERGY SOLUTION, LTD.**
Seoul 07335 (KR)

(30) Priority: **20.11.2017 KR 20170155076**

(72) Inventor: **CHOI, Hae In**
34122 Daejeon (KR)

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
18879208.9 / 3 661 002

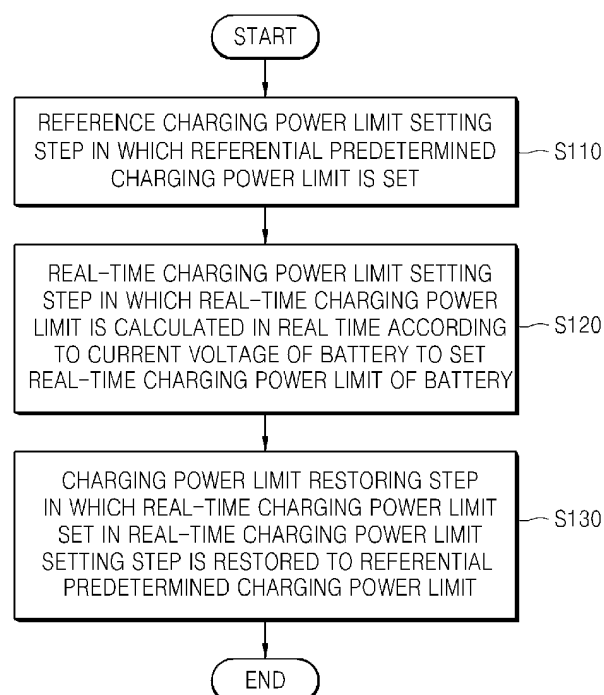
(74) Representative: **Plasseraud IP**
66, rue de la Chaussée d'Antin
75440 Paris Cedex 09 (FR)

(54) **METHOD FOR CONTROLLING BATTERY POWER LIMIT VALUE**

(57) A method for setting a charging power limit of a battery when charging the battery, according to an embodiment of the present invention, may include a reference charging power limit setting step in which a referential predetermined charging power limit is set, and a

real-time charging power limit setting step in which a charging power limit of the battery is set to the real-time charging power limit calculated in the real-time charging power limit calculation step.

[fig1]





EUROPEAN SEARCH REPORT

Application Number

EP 23 17 6079

5

10

15

20

25

30

35

40

45

50

55

1

EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 3 046 211 A2 (BLACK & DECKER INC [US]) 20 July 2016 (2016-07-20)	1-4, 7-10	INV. H02J7/00
A	* paragraph [0007] - paragraph [0009] * * paragraph [0017] * * paragraph [0043] - paragraph [0050]; figures 13-16 *	5, 6, 11, 12	H01M10/44
X	US 2011/204850 A1 (KAINO TOMOMI [JP]) 25 August 2011 (2011-08-25)	1-4, 7-10	
A	* paragraph [0010] - paragraph [0079]; figures 1-3 *	5, 6, 11, 12	
X	US 2016/344201 A1 (MASUKO HIROYUKI [JP]) 24 November 2016 (2016-11-24)	1-4, 7-10	
A	* paragraph [0012] - paragraph [0033]; figures 1, 2 *	5, 6, 11, 12	
X	US 2011/006733 A1 (TATEBAYASHI YOSHINAO [JP]) 13 January 2011 (2011-01-13)	1, 7	
A	* paragraph [0024] - paragraph [0049]; figures 1-5 *	2-6, 8-12	TECHNICAL FIELDS SEARCHED (IPC)
X	US 2006/284614 A1 (KIM DO Y [KR] ET AL) 21 December 2006 (2006-12-21)	1, 7	H02J H01M
A	* paragraph [0010] - paragraph [0043]; figures 1-6 *	2-6, 8-12	
X	US 2014/183938 A1 (PESWANI SANJAY [US]) 3 July 2014 (2014-07-03)	1, 7	
A	* paragraph [0010] - paragraph [0036]; figures 1-3 *	2-6, 8-12	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 12 October 2023	Examiner Mäki-Mantila, Harri
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 23 17 6079

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-10-2023

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 3046211 A2	20-07-2016	EP 3046211 A2	20-07-2016
		EP 3249776 A1	29-11-2017
		US 2016204626 A1	14-07-2016
US 2011204850 A1	25-08-2011	CN 102163755 A	24-08-2011
		JP 5537992 B2	02-07-2014
		JP 2011176941 A	08-09-2011
		US 2011204850 A1	25-08-2011
US 2016344201 A1	24-11-2016	CN 106169784 A	30-11-2016
		JP 6537886 B2	03-07-2019
		JP 2016220354 A	22-12-2016
		KR 20160135658 A	28-11-2016
		TW 201644144 A	16-12-2016
		US 2016344201 A1	24-11-2016
US 2011006733 A1	13-01-2011	CN 101953016 A	19-01-2011
		JP 5459649 B2	02-04-2014
		JP 2009232664 A	08-10-2009
		US 2011006733 A1	13-01-2011
		WO 2009119271 A1	01-10-2009
US 2006284614 A1	21-12-2006	CN 101199096 A	11-06-2008
		EP 1897201 A1	12-03-2008
		JP 5001938 B2	15-08-2012
		JP 2008547365 A	25-12-2008
		KR 20060130509 A	19-12-2006
		TW I333288 B	11-11-2010
		US 2006284614 A1	21-12-2006
		WO 2006135192 A1	21-12-2006
US 2014183938 A1	03-07-2014	KR 20140088006 A	09-07-2014
		US 2014183938 A1	03-07-2014